

5ub
B5
Cont'd

wherein the first and second layers are integrally bonded together by an adhesive, and the polymer film layer, either alone or in combination with the adhesive, provides a moisture vapor barrier.

19. A ream of paper wrapped together as a package with a sheet of the composite wrap material of Claim 18.

A3
Cont'd

20. The ream of paper according to Claim 18, wherein the composite wrap material provides a barrier to effectively prevent moisture absorption and curling of the packaged paper.

5ub
B6

21. The ream of paper according to Claim 18, wherein the composite wrap material has the fold characteristics of paper.

REMARKS

The Examiner has required that claims 13 and 14 be cancelled, as non-elected claims. Those claims are now cancelled herewith.

The Examiner has also objected to claims 5 and 6 because of certain informalities. Those claims have now been amended so as to remove those informalities.

The Examiner has rejected claims 1, 2, 6 and 8 under 35 U.S.C. § 102(b) as being anticipated by Akao et al., U.S. Patent No. 4,359,499. In response, applicant has cancelled claim 2 and amended claim 1. As amended, claim 1 now provides for a composite wrap material specifically designed for use in wrapping reams of paper. By contrast, the structure in Akao is specifically designed for providing a bag for carrying photo-sensitive materials, such as

photographic film or paper, which is vulnerable to light. This would be a substantially different type of material than the claimed material, and would require parameters which are not analogous to the material used to wrap reams of paper. In addition, the Akao reference makes no reference whatsoever to the real world problem encountered by the inventors of the present invention that air pockets between the layers can cause substantial problems. Claim 1, as amended, requires that there be substantially no air pockets between the first layer of paper, and the second layer, of a polymer film. Accordingly, the present invention solves a problem not even raised by the reference. The rejection of claim 1 on the basis of Akao may therefore now be withdrawn. As indicated above, claim 2 has been cancelled. Claims 6 (as amended) and 8 depend from claim 1, and are allowable over the Akao et al. reference for the same reasons.

The Examiner has also rejected claims 1, 2, 6, and 8 under 35 U.S.C. § 102(b) as being anticipated by Gibbons et al., U.S. Patent No. 4,948,640. Here again, claim 1 has been amended so as to require that the material be used in wrapping reams of paper. The structure in Gibbons, on the other hand, is designed for use in creating an improved container for juices and other drinkable liquids. As indicated at column 2, lines 21-27, the Gibbons composite has specific structure devoted to creating a barrier to the loss of vitamin C and a barrier to the loss of essential flavor oils. Claim 1, in contract, has been amended to require that the wrap material have the fold characteristics of paper. Clearly the structure of Gibbons, the type of material that is formed into juice boxes, has substantially different fold characteristics than paper. Accordingly, the rejection of claim 1 under 35 U.S.C. § 102(b) on the basis of Gibbons may now be withdrawn. Here again, claim 2 has been cancelled, and claims 6 and 8 are allowable for the same reasons as claim 1.

due to process of operations
main layer
interlayer
side as
near as
possible

preamble
adds a
potentially
weight
to claims

in def.?
it folds to form box

maintain

The Examiner has also rejected claims 1, 2, 6 and 8 under 35 U.S.C. §102(b) as being anticipated by Kato et al., U.S. Patent No. 5,527,622. Similar to Gibbons, Kato has described a laminate for use in constructing containers for drinkable liquids, such as milk, juices, coffee drinks, soups and so on. The multi-layer structure described in Kato is quite unsuitable for use as a ream-wrap for wrapping reams of paper. Accordingly, the amendments made to claim 1, described above, include the specification of wrapping reams of paper, and including the requirement that the wrap material has the fold characteristics of paper, make the material described in Kato completely non-analogous. That is a person of ordinary skill in the art, following the Kato reference, would not be able to produce a suitable ream-wrap material. Accordingly, this rejection may now also be withdrawn. And, as above, claim 2 has been cancelled and claims 6 and 8 are allowable for the same reasons as claim 1. *maintain*

The Examiner has also rejected claims 1-4, 6, 8, 9 and 11 under 35 U.S.C. § 102(e) as anticipated by Wenzel et al., U.S. Patent No. 5,837,383. The structure disclosed in Wenzel, however, calls for the application of liquid coatings to a paper substrate. See column 4, lines 46-47, where both coats are described as "water-based emulsions or dispersions." The balance of that paragraph makes it abundantly clear that the coatings are to be applied in liquid form, and thereafter dried, that is, the water that had carried the material deposited is thereafter removed. To the contrary, the film material called for in claim 1, while it may be liquid in the sense of a molten state at an earlier stage in the process, is a solid film material at the time it is applied. The fact that it is solid is now reflected in claim 1, as amended. This difference results in a substantial reduction in the expense of preparation of the composite wrap material as claimed, as all of the drying steps and apparatus described in the Wenzel et al. patent are simply not *process condition*

necessary. That is, the apparatus used to apply the solid film is vastly different than the apparatus used to apply the water-based coating of Wenzel and then dry it, so that the two technologies are not at all analogous. Accordingly, this rejection of claim 1 may now be withdrawn. Claims 2-4 have been cancelled. Claims 6, 8, 9 and 11 are allowable for the same reasons as claim 1.

The Examiner has also rejected claims 1, 2, 6, and 8 under 35 U.S.C. § 102(e) as anticipated by Parks, U.S. Patent No. 5,725,917. Here again, the Parks reference discloses an eight layer material (Column 2, line 46) or a five layer material, (Column 2, line 51). As can be seen from the background of the invention, Column 1, lines 5-18, this laminate also is designed for juice boxes and other drinkable liquids, with their essential oils and flavors which must be protected. Fold characteristics of such a laminate are much less important, and are certainly not the fold characteristics of paper. Accordingly, this rejection of claim 1 may now also be withdrawn. Claims 6 and 8 are allowable for the same reasons.

The Examiner has also rejected claims 1, 3, 4, 5 and 7-11 under 35 U.S.C. § 103(a) as unpatentable over Bunker et al., U.S. Patent No. 5,128,182, in view of another Gibbons patent U.S. Patent No. 4,888,222. This rejection is no longer applicable for several reasons, based on the amendments now presented to claim 1. In particular, claim 1 now specifically provides that the first and second layers are bonded together so that there are substantially no air pockets between the two layers. Bunker et al. specifically provides air pockets between the layers, as an advantageous improvement, even specifically describing, in reference to Fig. 3, structure for producing the sheet of wrap material with the air pockets. Accordingly, this rejection of claim 1

may now be withdrawn. With claims 3, 4 and 7 now cancelled, claims 5 and 8-11 are allowable for the same reasons as claim 1.

The Examiner has also rejected claim 12 under 35 U.S.C. § 103(a) as unpatentable over the Bunker and Gibbons references referred to immediately above, and further in view of the Mishina patent, U.S. Patent No. 4,363,851. This rejection is based upon the use of the Bunker reference, and the fact that claim 12 is dependent upon claim 1. As indicated above, the Bunker reference is really substantially inapplicable to the elements of claim 1, as amended herewith. Accordingly, this rejection should be withdrawn for the same reasons as set forth in the above paragraph with respect to claim 1 and the Bunker reference, in view of the Gibbons '222 reference.

Withdraw

The Examiner then further rejected claims 15-17 under 35 U.S.C. § 103(a) as unpatentable over each of the references which resulted in a 102 rejection of claim 1, in view of Wittosch, U.S. patent number 5,989,724. Each of the arguments set forth above with respect to the base claim, in comparison with the amended claim 1, apply here equally well. In addition, Applicants point out that the Wittosch reference sets forth merely the application of coatings to a paper substrate, rather than the application of a film layer. Accordingly, for that reason in addition to the reasons set forth above, claims 15 and 16 (17 has been cancelled) are allowable. These rejections may now also be withdrawn.

Maintain

Applicants have presented herewith four new claims, claims 18-21. Claim 18 calls for a composite wrap material consisting of a first layer of paper and a second layer of polymer film material in solid form. Such a construction contemplates the inclusion of printing, that is, ink

applied in certain patterns that form letters and artwork, but no other layers of any type in the structural sense. The claimed invention is thus clearly distinguished from any construction having more layers, such as that disclosed in Parks, Kato or Gibbons '640. The claimed invention is also distinguished from any coating applied to paper, as the film is required to be applied in solid form, rather than in liquid form, and thereafter dried. Claim 18 further requires that the two layers are integrally bonded together by an adhesive and that a moisture vapor barrier is provided by the film layer, either alone or in combination with the adhesive. ND

Accordingly, newly presented claim 18 is in allowable form. Claims, 19, 20 and 21 are dependent from claim 18 and are allowable for the same reasons.

Therefore it appears that this application, now containing claims 1, 5, 6, 8-12, 15, 16 and 18-21 is now in allowable form and allowance of these claims at an early date is earnestly solicited. Should the Examiner disagree or believe that, for any other reason, direct contact with the attorney for the Applicant would advance the prosecution of this case, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,



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